sion models for costs and LOS used log transformation techniques. **RESULTS:** A total of 62,527 patients (8,800 Bleeding; 53,727 Non-Bleeding) were included. Patients who received blood/blood products were significantly different in a number of baseline characteristics including Charlson Comorbidity Index. Unadjusted outcomes demonstrated significant differences in mean total costs ($43,375 Bleeding; $18,411 Non-Bleeding; p<0.001) and LOS (13.62 Bleeding; 7.53 Non-Bleeding; p<0.001) for patients who received blood products compared with those who did not. Multivariate models adjusting for patient characteristics demonstrated that patients who received blood/blood products had 38.9% greater LOS and 34.3% greater ICU LOS. They also were 3.53 times as likely to be admitted to the ICU, 3.75 times as likely to be readmitted for bleeding and 4.09 times as likely to die in hospital (all p<0.001). Furthermore, they had 32.9% greater total cost of care including blood product cost and 31.8% greater total cost of care excluding blood product cost (both p<0.001). **CONCLUSIONS:** Preventing or rapidly controlling emergent bleeding in trauma patients would likely reduce patient risk and avoid elevated costs of hospitalization.

PCV71

THE ECONOMIC IMPACT OF HYPERTENSION IN HEALTH CARE SYSTEM OF PAKISTAN

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OBJECTIVES: Hypertension (HTN) is a severe public health issue across the globe and a major risk factor for various cardiovascular diseases. This study was aimed to examine the potential costs of prognostic utilities and direct and indirect health care costs of the treatment of HTN in patients visiting public hospitals in Pakistan. **METHODS:** A cross-sectional, convenient-sampling oriented study was conducted in patients attending public hospitals in Pakistan. The direct and indirect health care costs were assessed by different variables i.e. consultation fees, cost of medicines, travelling costs, laboratory test expenses. All obtained data were analyzed using descriptive and inferential statistics. **RESULTS:** The mean annual direct health care cost for a HTN patient was around PKRs. 19789.88 (US$ 201.21) and indirect health care cost was PKRs. 11990.90 (US$ 121.92). It was also observed that the mean indirect health care costs per patient were significantly varied (p < 0.001) among different public hospitals. **CONCLUSIONS:** Type of the HTN, distance to the hospital and length of stay in the hospital were proportional to the direct and indirect health care costs of the HTN patients. Better management of HTN can favorably impact the disease burden as untreated HTN or its comorbidities increase the overall treatment costs which affect affordability of the patient.

PCV72

HOSPITAL COSTS OF ISCHEMIC STROKE AND TRANSIENT ISCHEMIC ATTACK IN THE NETHERLANDS

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OBJECTIVES: Advances in the prevention and treatment of ischemic stroke and transient ischemic attack (TIA) during the past two decades have resulted in changes of medical practice. However, the existing cost estimates of ischemic stroke and TIA are based on resource use and cost data of approximately 20 years ago. We therefore determined hospital costs of ischemic stroke and TIA in the Netherlands for 2012. **METHODS:** A retrospective cost analysis was conducted using patient and resource use data from the Diagnosis Treatment Combination (Diagnose Behandeling Combinatie) casemix system. Four subgroups were analysed: inpatient ischemic stroke, inpatient TIA, outpatient ischemic stroke, and outpatient TIA. Additionally, we estimated the costs for carotid endarterectomy. Unit costs were based on 2012 reference prices of the Dutch Manual of Costing and tariffs provided by the Dutch Healthcare Authority. Ordinary least squares regression analysis was used to examine the association between hospital costs and various patient and hospital characteristics. **RESULTS:** A total of 35,903 ischemic stroke and 21,653 TIA patients were included. Inpatient care costs for ischemic stroke were €5,328 while the costs for TIA were €2,470. Outpatient costs were estimated at €495 for ischemic stroke and €587 for TIA. Average hospital costs for carotid endarterectomy were estimated at €6,836. The number of inpatient days was the greatest contributor to hospital costs for ischemic stroke and TIA patients. Age, type of hospital, and region were strong predictors of hospital costs. **CONCLUSIONS:** This study is the most recent and extensive cost analysis of inpatient and outpatient hospital costs of ischemic stroke and TIA patients. Our results may be used as input for economic evaluations and health economic models to support decision making about reimbursement, investment, and pricing of health care interventions.

PCV74

COSTS OF TREATING CARDIOVASCULAR EVENTS IN GERMANY: A SYSTEMATIC LITERATURE REVIEW

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OBJECTIVES: Cardiovascular events (CVE) are the number one cause of death (42%) in Germany. This study evaluates available literature regarding direct medical costs related to CVE in Germany. The CVE of interest were myocardial infarction (MI), unstable angina, heart failure (HF), stroke, and peripheral artery disease (PAD). Update of a review conducted in 2012. **METHODS:** A systematic literature search was performed in the following databases- Medline, Embase, Centre for Reviews and Dissemination, TIBORDER, and German dissertation database from 01/2003 to 10/2013. Observational studies and randomized clinical trials were considered for the review. **RESULTS:** The search identified 400 publications; 13 were included in this review. For MI, average hospitalization costs during acute phase were between € 5,836 and € 7,522 per admission (PA). In the first year after a MI, direct medical costs were € 11,672 - 12,713 per patient. Average costs of treating unstable angina were € 2,217 - 3,644 PA. Direct medical costs of chronic HF patients were between € 3,150 - 4,792 per patient per year. Average treatment costs for hospitalized PAD in the acute phase were € 4,186 PA, € 2,138 during month 1-6 after initial hospitalization, € 1,350 in month 7-12, and € 1,172 in month 13-18. For stroke, total direct medical costs in year one were € 11,408 per patient. Total direct medical costs during the 1st year after an ischemic stroke event were € 15,573 - 18,517 per patient, € 5,280 in month 13-18, and € 5,479 per year in the subsequent 4 years. **CONCLUSIONS:** MI, unstable angina, HF, stroke and PAD have a high financial impact on the German health care system. Treatment costs in the first year after event were highest for MI with €11,672 – 12,713 per patient followed by stroke with €11,408 per patient demonstrating need for improvement in preventing CVE.

PCV75

ANNUAL COST OF CONSERVATIVE TREATMENT OF SUPRAVENTRICULAR TACHYCARDIAS IN POLAND

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OBJECTIVES: Supraventricular tachycardias (SVT) are a group of arrhythmias which result in significant impairment of health-related quality of life (HRQoL). While not as common as atrial fibrillation, SVT are still a significant health care problem since an average time from the onset of symptoms to successful ablation exceeds 10 years both in highly and less developed countries. The aim of this study was to calculate an annual cost of conservative treatment of SVT in Poland. **METHODS:** This was an economical part of The PPRA study (NCT01594814). PPRA was a single-center, prospective, cohort study conducted in tertiary care cardiology center in Poland. All data concerning health care resources utilization: outpatient and inpatient visits, emergency room (ER) consultations, drugs etc. were derived from the study. Costs of disease related groups (DRG), outpatient visits and reimbursed drugs were derived from official price lists of Polish National Health Fund (NHF). Costs of ER visits were calculated as a mean cost of visit derived from seven hospitals of different levels of care. Costs of medical transport were calculated as a mean cost derived from four different centers providing ambulance services. Cost of non-reimbursed drugs and of outpatient visits and diagnostic tests in private sector were calculated as a mean cost of those resources available on official websites of nation-wide providers. All costs are presented in Euro (EUR) as median [interquartile range]. **RESULTS:** During 1.5 years, 82 patients were enrolled and the data for this analysis was available for all patients. The yearly median cost of conservative treatment of SVT was EUR 415 [237-727] from the NHS perspective and EUR 468 [280-793] from the societal perspective. Those costs were mainly driven by costs of hospitalizations and ER. **CONCLUSIONS:** Annual cost of conservative treatment of SVT is substantial and driven mainly by hospital services.

PCV76

LINKING HEALTH CARE ADMINISTRATIVE DATABASES AND NATIONAL REGISTRY DATA IN ORDER TO MONITOR ICD THERAPY IN ITALY

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OBJECTIVES: The main purpose of study was to evaluate the utilization of implantable cardioverter defibrillator (ICD) with or without cardiac resynchronization pacing (CRT-D) in Lombardy, the most populated Italian region with universal health care coverage for about 10 million inhabitants, from 2000 to 2010. The second aim was to assess health care resources utilization after a first ICD implantation, highlighting differences between implant indication (primary and secondary) or ICD type (single-chamber, dual-chamber and CRT-D). **METHODS:** Data were extracted from: i) the data warehouse DENALI that organizes health care administrative databases concerning all subjects covered by Lombardy Health System; ii) ICD National registry data. Linking DENALI and registry data, we developed and validated (with Cohen's kappa coefficient) an algorithm to distinguish hospitalizations for ICD in first implant and replacement in order to estimate the annual rates of first implant (per million person-years) and replacement (per hundred person-years). We selected a cohort of patients who underwent a first ICD implantation and we followed them until 12/31/2010, recording vital status and health care resources consumed: hospitalizations, drugs and outpatient claims. **RESULTS:** We identified 25,358 hospitalizations for ICD implantation: 17,864 for a first ICD and 8,034 for a replacement. 86% of hospitalizations found a match in the National registry and the Cohen's kappa coefficient showed values over 0.8 from 2005. The annual rates were 232.5 (95%CI: 228.5-236.4) and 10.5 (95%CI: 10.3-10.7) for first ICD and replacement respectively. We selected a cohort of 12,525 patients who underwent a first ICD: 55% were implanted in primary prevention and the ICD types were: 35% single-chamber, 29% dual-chamber and 35% CRT-D. Among these groups, we detected differences in survival, ICD duration and health care resources utilization. **CONCLUSIONS:** The combined use of information from national ICD registry and health care administrative databases could overcome the limitation of both data sources and it could improve the monitoring of ICD therapy.

PCV77

DOES A 12-LEAD ECG MORE RELIABLY DETECT ATRIAL FIBRILATION THAN A RHYTHM STRIP ONLY ECG?

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OBJECTIVES: The 12-lead electrocardiogram (ECG) is the current gold standard for the diagnosis of atrial fibrillation (AF). However, undertaking a 12-lead ECG is cumbersome, expensive and time consuming compared to a rhythm strip alone. The AF detection rate using a single lead ECG compared with a12-lead ECG amongst trainees of varying degrees of experience has not yet been reviewed in depth. **METHODS:** Five doctors of different grades and specialties and one Cardiology Specialist Nurse